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Marketing and Credit Linkages: The Case of Corn Traders in the Southern Philippines

by

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Introduction

The decline in lending to Philippine agriculture from formal financial institutions as measured by a loan to gross domestic product ratio of 12 percent in the mid 1970s to 8 percent in the mid 1980s raises the question of who is financing agriculture [Blanco and Meyer]. Even though lending from formal financial institutions has increased in the last couple years, the question of who is financing agriculture continues to be an important issue.

Informal financial markets (IFMs) are said to be providing much of the credit in agriculture, especially to small farmers and other low income groups. According to one recent study, the majority of the rural population in the Philippines is either self-financed or a user of IFMs [Ghate]. Another study in rural areas estimates that about half of the farmers in the Philippines borrow money to finance production and/or consumption needs while the other half are self-financed [Tolentino]. Among those who borrow, this same study estimates that nearly two-thirds of the farmers borrow from IFMs.

The importance of IFMs and the services provided to users in developing countries are not well understood at the present time. An important reason for this lack of understanding of IFMs is the wide variety of phenomena that can be included in this sector and consequently the difficulty that people have in defining, studying and understanding IFMs. IFMs include a wide variety of individuals, firms and institutions that

undertake a significant amount of financial activity in the Philippines and many other developing countries. Some of these are moneylenders, pawnbrokers, friends and relatives, rotating savings and credit associations, merchants of all kinds (input suppliers, traders, millers and/or processors of agricultural commodities, retailers and wholesalers) and landowners. Only one member of this group (corn traders) are considered in this paper.

Many of the above firms and institutions may be considered as informal in terms of their financial activity while at the same time they function as formal institutions for some of their other business activities. IFMs are not a part of formal financial institutions such as commercial banks, savings and loan associations, stock exchanges, or credit unions because the financial transactions of IFMs do not involve the financial intermediation of formal financial institutions. An important characteristic of IFMs is that such financial transactions escape the review and control of monetary authorities such as central banks and other regulatory agencies, whereas formal financial institutions are subject to these controls. Freedom from central bank regulation is the characteristic most frequently mentioned as the essential difference between IFMs and formal financial markets. In many developing countries, IFMs are subject to other forms of regulation such as that found in the commercial code governing contracts, promissory notes and mortgages.

Justification for Study

In rural areas, marketing intermediaries for various farm products are frequently an important source of marketing services and financial services to farmers. Marketing intermediaries provide farmers a broad

range of services such as buying the product, transportation, grading, packaging, milling, drying, storage, price information, and farm input supply. In addition, these marketing intermediaries may provide a line of credit to the farmers. Farmers without access to credit from formal financial institutions tend to be large users of the intermediary credit; however, farmers with bank credit may also use the intermediary credit. This credit may be provided to the farmer before planting time, during the growing season or when the crop is ready for harvest. In return for this credit, the farmer agrees to sell his crop to that merchant. In most cases the farmer will repay the loan at the time the crop is sold to the intermediary. The farmer is charged interest for the loan either directly in some agreed upon way or indirectly through the price paid for the farmer's crop.

The marketing and credit link possesses many important advantages for the intermediary and the farmer as well as some potential disadvantages for the farmer. The intermediary provides a multiple service (product) output so that economies of scope between the marketing and credit outputs can be realized. Since the merchant generally lives in the area and knows the farmers well through the marketing contacts, the costs of acquiring information on borrower's cash flow, reliability and other characteristics as well as the lender transaction costs for the intermediary credit can be reduced. The credit also provides the intermediary with a guaranteed supply of the product at harvest time. The borrower transaction costs may also be low because the farmer can obtain a loan from the intermediary with little time, expense and paperwork. The main disadvantage of intermediary credit focuses on the structure and performance of this inter-

mediary market. Are these markets competitive or monopolistic? Are the intermediaries making excess profits on these activities? Are farmers paying too much for this credit and receiving too low a price for their output?

A commonly held view of marketing intermediaries is one of a large usurious, unscrupulous and monopolistic merchant/financier who exploits the producers because no other marketing alternatives and financial services are available to these people. Traders are further viewed as a group that performs no productive service to benefit the economy. Many government officials, farmers and consumers hold this view for a variety of reasons. A recent Philippine example of this view is contained in the wording of a legislative proposal by a Philippine member of the House of Representatives to revise the Rural Bank Act. The proposal states that "Farmers will always need credit. Failure of rural banks to meet their credit requirements will force them to turn to unscrupulous traders, landlords and non-formal lenders who, like vultures on the wings, impose usurious rates of interest, causing much marginalization and pauperization of small farmers and landless workers" [Real, Jr.]. Such views may be based on few facts and information. Baseline studies are needed to improve our understanding of marketing intermediaries, the credit and marketing services provided, the cost of those services, and their linkages to formal finance and the macro economy. We need to know if the commonly held views toward intermediaries are correct or incorrect. If correct, what are the alternative ways to expand the scope of financial market services to reach more people at lower cost? If the views are

incorrect, are marketing and credit linkages of intermediaries a more effective way to reach more people at lower cost?

Study Objective and Approach

The present study describes and analyzes the marketing and credit links for private sector corn intermediaries in Southern Philippines. Corn intermediaries are selected for this study because corn is an important crop for a large number of small farmers in the Philippines. Corn production generally exceeds 4 million metric tons annually which places corn third after palay (rice) and coconut in terms of output (Table 1). Corn ranks first in area harvested and second in the value of production among agricultural crops. Mindanao produces about 60 percent of the corn output, has a relatively large number of small scale corn farmers and is also an important trading and consuming region.

A questionnaire was developed to collect information on the size and characteristics of the corn marketing intermediaries, the structure and performance of these intermediaries, the marketing and financial services provided, the cost of those services, the sources and uses of funds, loan terms and conditions, repayment rates, and economies of scope with respect to information.

The field work began in August and was completed in September of 1988 in Cagayan del Oro and General Santos. Thirty questionnaires with corn intermediaries in these two areas were completed. Interviews were completed with the two main types of large and small municipal traders and provincial traders. Some of the results of the analysis are sensitive to the small sample size and substantial size differences among traders.

Before the field work started, visits were made to researchers and policy makers at the Philippine Institute of Development Studies, the Agricultural Credit Policy Council, University of The Philippines, rural banks, the Land Bank, National Food Authority, the Agency for International Development and with corn traders, corn millers, and livestock feeders in Manila, Cebu, Cagayan del Oro and General Santos. The people contacted expressed a keen interest in the study because of the importance of IFMs in the Philippines and because no comprehensive study of corn trader financing of corn farmers is currently available.

Contacts with key traders were used to discuss plans for the survey work and to obtain their participation in the survey. After this consultant completed the initial contacts, the field work was coordinated by the Citibank Chief of Party for the AID project in Manila. Two experienced Philippine interviewers were hired and trained for the field work. A cover letter from Citibank to each trader, attached to the questionnaire, explained the purposes of the project, asked for their cooperation in the study and indicated that their responses would be kept in strict confidence.

Conceptual Approach

The model adopted for this study builds from the theory of competitive or contestable markets as well as the theory of economies of scope. Economies of scope apply to the firm producing multiple products or services as contrasted to the firm producing a single product or service. Economies of scope refer to the situation in which the cost of producing two products in combination is less than the cost of producing each product separately [Baumol et al.]. Economies of scope describe the cost

savings that may result from the simultaneous production of several different outputs or products in a single enterprise as contrasted with their production in isolation by specialized firms. Cost savings occur because the joint production utilizes some factors of production that may be considered public inputs in the sense that once they are acquired for use in producing one good, they are available costlessly for use in the production of others [Baumol et al., p. 76].

Economies of scope describe the joint products of marketing and credit services produced by corn traders in the Philippines. The cost to these merchants of providing credit services in addition to the marketing services is lower than is the cost of providing credit services by a specialized credit bank because of the economies of scope, especially as they relate to information costs about the borrower. For example, through the marketing contacts with the farmer, the corn trader already knows about the cash flow of the farmer, his loan repayment record as well as his dependability and character. Economies of scope from credit to marketing also exist because of the assured supply of product from the farmer to the trader.

Corn Marketing and Credit System

Corn production consists of white and yellow corn in which the white corn is made into grits for food consumption, with the by-products (40 percent) used for feed, and the yellow corn is used primarily for animal feeds. In recent years food use has accounted for about 36 percent of total demand and feed, seed and industrial use has accounted for about 64 percent of total demand (Table 1).

The commodity flow of corn from producer to consumer (end user) is illustrated in Figure 1. General Santos is a large trading center that assembles and ships white and yellow corn to the main consuming markets of Cebu and Manila. Cagayan del Oro is a smaller trading center that performs the same functions. On the one hand, the marketing chain is quite short for the big farmers (100 hectares or more) and the small farmers (2-3 hectares) who live nearby General Santos and sell directly to large traders in General Santos. On the other hand, the marketing chain becomes quite long for small farmers in the interior who sell to local traders who sell to larger traders who sell to General Santos traders. Among the end users, there are a few large, highly integrated firms (5 or 6) that purchase a high percentage of the final product. This small number of large end users with a large market share appears to have substantial market power in the corn market.

Traders provide many important marketing services to corn farmers in addition to buying and selling the commodity. Some of the most frequently reported services are transportation, bags, bagging, shelling, drying, grading, storage, milling, financing, and price and technical information (Table 2). Not all traders provide all of these marketing services to farmers. Input supply, for example, is more common among the small traders located close to the producing areas than among the large traders. Financing is a service provided by 68 percent of corn traders. Among the larger traders, transportation, bags, bagging, drying and storage are the most frequently provided services. Few traders reported providing corn harvesting or grading services. Eighty percent of the traders reported paying cash for the corn at the time of purchase from farmers rather than

credit purchases which occur in some countries. Among the corn traders who purchase corn on credit, the most common type of credit is a short term trader credit with payment made 7 to 10 days after purchase. One trader provides disaster crop insurance coverage with the Philippine Crop Insurance Corporation (PCIC) to farmers and may even require the insurance from farmer borrowers.

Since resources are used in performing these services, there is an associated cost to provide the services and traders must charge farmers for the services. Corn traders charge for nearly all of the services mentioned above with the exception of the bags which are frequently provided free of charge because the merchant knows that the bags will be returned with the corn in a few days time.

Consumers, farmers and policy makers frequently do not recognize the productive nature of these services or the associated costs and tend to believe that marketing margins for products are too high. High marketing costs that result in large differences between prices paid by consumers and prices received by producers do not necessarily mean that intermediaries are earning large profits. At the time of the survey, South Cotabato interior farm prices for yellow corn were about P2.10/kg., General Santos prices about P2.45 to 2.50 and Manila prices about P3.20 to 3.50. The price differences or marketing margins are large; however, marketing costs, especially inland and ocean transportation as well as handling and port costs are said to be high because of poor infrastructure. Thus, high marketing costs and marketing margins do not automatically mean that intermediary profits or net margins are high.

Traders provide several financial services to small farmers, especially input sales on credit and/or cash advances when needed for family expenses and emergencies. The marketing and credit link is that the trader provides credit and the farmer agrees to sell his/her output to the trader. As Figure 2 illustrates, the large traders in General Santos provide credit directly to some farmers, to barangay traders who provide credit to farmers and to municipal traders who finance barangay traders who finance farmers. This credit is most frequently in the form of cash advances and less frequently in the form of input sales. Farmers may also borrow from landowners or relatives or moneylenders, but the trader is the most common source of funds. According to the corn trader interviews, the farmer borrows 66 percent of his funds from traders, 13 percent from relatives, 14 percent from moneylenders, 5 percent from banks and the balance from other sources. Some hybrid seed corn companies also sell seed corn on credit but they want to stop this practice because of the many repayment problems and high cost associated with this practice.

A few traders (15 percent) reported no borrowing of funds to finance their activities. Another 15 percent of traders used firm equity as the main source of funds (50 to 60 percent) plus borrowing from friends and relatives to finance their operations. The majority of firms (70 percent) reported that bank financing accounted for about 60 percent of their funds and firm equity for the remaining 40 percent. Interest rates on bank financing for traders ranged from 1.5 to 3 percent monthly for short-term credit with urban real estate used as the most common collateral for the loans. Only two of the thirty corn traders reported borrowing from moneylenders.

Market Organization and Efficiency

Traders are a very diverse, well educated group with many different businesses such as pig raising, poultry raising, logging, fishing, farming, corn milling and feed milling. They also trade other commodities such as rice and coconut. Chinese immigrants or descendants of Chinese tend to dominate corn trade in the trading centers. These closely related business activities as well as ethnic ties produce further economies of scope as discussed above.

Most traders (85 percent) are college graduates with degrees in engineering or business (Table 3). The traders have been in the corn business an average of 10 years; however, there seems to be an older group that has been in the business for 20 years or more and a younger group (67 percent of the traders) that has been in business for less than 10 years. Most trader businesses are organized as sole proprietorships that employ from 1 to 200 full time persons plus a small amount of part-time help. Frequently some of the full time employees are family members of the owner.

The traders averaged about P 10 million in corn purchases with a range from P 100,000 to P 185 million in 1988 (Table 3). The small municipal traders were defined to be those with corn purchases up P 3 million annually which included 13 traders in the two areas. Large traders included any trader over P 3 million annually which included 17 traders in the two areas. Several of the large traders were concentrated in the P 30 to 40 million range of corn purchases. The traders typically have a small office, a warehouse that ranges from 500 to 200,000 bags of 50 kg. of storage capacity, trucks, dryers, scales and other grain handling equip-

ment. The small traders reported 30 to 50 regular suppliers who generally represent a combination of farmers and other smaller traders. The large traders usually reported over 100 suppliers and the largest trader reported 3000 suppliers. The large traders buy primarily from the small and large municipal traders and a few farmers. All the traders reported that they also buy corn from farmers or suppliers who do not borrow from them which indicates that farmers are not totally locked to the one trader who supplied them credit.

As Table 4 illustrates, the estimated number of corn traders for Manila is 65 and for General Santos 41. Cagayan del Oro is estimated to have 20 to 30 corn traders. The Manila corn traders tend to be much larger than the General Santos traders. In both cases, the number of traders is quite large, so the market at the trader level appears to be very competitive. Traders reported an average of 21 competitors in their market area (Table 3). The smallest number of competitors reported by a corn trader equalled five. Traders complain that the market is more competitive each year because the new entrants increase the pressure on operating margins. Two multi-national companies (Cargill and Pioneer) have entered the hybrid seed corn business in competition with San Miquel Corporation and Cargill is also a corn trader.

Corn traders seem to be earning better than average returns to their capital and labor in a free enterprise economy but do not appear to be earning, large monopoly profits. However, no precise figures on income or profits could be collected in the questionnaire. Because of the diverse and integrated nature of the trader activities, it is very difficult to evaluate which of the many activities is most profitable and which may be

only marginal operations. Competition made possible by low barriers to entry prevent the firms from earning large monopoly profits in the long run. The National Food Authority (NFA) also competes in the corn market to protect the public interest through its purchase and storage program. NFA purchased about 5 percent of corn production in the price stabilization program in 1986 in a major producing region (Table 5). These purchases provide some private trader competition in production areas, especially at harvest time. More recently, the performance of NFA has reached a low level because of large operating deficits and the firing of the head of NFA during August of 1988.

Traders complain that import policies frequently cause problems for the corn marketing system because imports tend to arrive at the wrong times and accentuate the price fluctuations caused by a quite stable demand and a seasonal supply. Lack of accurate and timely information about current demand and supply, political pressures from opposing interest groups such as producers, traders and end users and foreign exchange shortages all contribute to the difficulties of making the correct decisions on corn imports.

According to the corn traders, some of the pricing policies of the NFA also create problems for millers and traders. The policy of one farm support price for the entire country that ignores transportation costs and comparative advantage differences leads to price distortions among producing and consuming regions of the country. The flat seasonal price policy of NFA within the calendar year destroys incentives for the private sector holding of storage stocks to earn storage returns through seasonal price fluctuations (Table 6). The relative pricing among competing foods,

especially corn grits vs. rice and wheat can influence consumption in a significant way. If wheat, for example, becomes cheap relative to corn grits, consumers switch from the domestically produced corn to the imported wheat.

Trader Credit Services

Corn traders service the credit needs of a very large segment of the farmers in rural areas that cannot be reached by the Land Bank, rural banks or commercial banks at the present time. The formal financial system is not sufficiently developed to serve the financial needs of these millions of small borrowers.

As can be seen in Table 7, corn traders identified several items that the traders believe gives them a competitive advantage relative to banks in lending to corn farmers. These advantages result in low lender and borrower transaction costs compared to banks. Lender costs are low because few resources are used by the firm for this activity. A simple entry with the farmers name and the amount is all that is needed to make a loan. Nearly all traders indicated that their administrative costs of lending were low; however, no precise cost estimate could be obtained from them. A farmer's ability to pay, character, trust and loyalty are the main items that traders consider in making a loan (Table 8). Traders in rural areas know the farmer clients well; it is not uncommon for the traders to serve as Godparents (compadres) for a farmer's child, to present gifts at a son or daughter's graduation or wedding and to make loans for family emergencies when requested. The non-interest borrowing costs to the farmer for travel time, expenses, paperwork and bribes are minimal (one stop financing) for trader credit compared to bank funds so that the effective rate

of interest is comparable to bank funds, if the latter were available to the borrower.

Consumption loans as well as production loans can be obtained. Most corn traders reported a loan portfolio with farmers and other corn suppliers in the range of P 200,000 to 400,000 for 1988. The largest amount reported was a loan portfolio of P 8,000,000. The average size of loan to farmers was about P 8,575 in 1988 with a range from P 1,000 to P 50,000 (Table 9). Corn traders reported an average of 75 loans per trader. One small trader will lend a maximum of P 1,000 per borrower. Another trader who will lend up to P 5,000 per hectare of corn also requires that the borrower obtain crop insurance of P 150 per hectare which is included in the loan amount. Length of the loan is flexible although most farm loans are for 3 months with a range from 2 to 4 months.

For the 40 percent of traders who reported charging interest directly, the interest rates are quite variable (ranging from 2 to 10 percent monthly with a 4 percent average, Table 9). The average interest rate is 1 or 2 points above bank rates; however, the farmer's effective rate may be lower because the farmer does not have all the non-interest costs that are common when borrowing from banks. More importantly, the farmer has access to financing from the trader in contrast to his lack of access to bank financing. Moneylender interest rates were reported to be a couple points higher than corn trader interest rates. A few traders claim that they do not charge any interest either directly or indirectly because they are only interested in the opportunity to buy the corn. These traders stated that having a guarantee on at least some minimal supply of corn is the most important consideration to them. Fifty percent of traders

reported that instead of charging interest directly on the loan that the interest charge is factored into a lower purchase price of corn; usually about P.05 to.10 per kilo below the current market price which is roughly equivalent to a 1 to 1.5 percent monthly rate depending upon the market price of corn.

Precise information on repayments rates is difficult to obtain and one must remember that small farmers are high risk borrowers. Although default rates reported by corn traders on loans to farmers are low (18 percent) compared to bank default rates for agricultural loans, traders do have bad loans and a few traders are no longer lending to farmers (Table 9). Most of the traders reported default rates in the 5 to 10 percent range although one trader reported a default rate of 70 percent. Another trader said he loses P500,000 per year on bad loans to farmers. Some of these traders have become cash market buyers in the classic sense of the word and have added a new element of price competition to the market. An important factor encouraging repayment that was mentioned by several traders is that the farmer who fails to repay will never be able to obtain a future loan for the next crop year. In addition, the "suki" system of lending only to the prime clients who can be trusted that the trader has known for many years improves the repayment rate and lowers lending costs. According to traders, crop failure or unexpected borrowing are the major reasons for non-repayment of loans. It is very unusual for a farmer to harvest the crop and then refuse to re-pay his loan. In the case of non-payment, traders indicated that they will carry the loan to the second or third crop so that the farmer eventually repays the loan.

Conclusions and Recommendations

Corn traders provide many valuable marketing and financial services to large numbers of small farmers in the Mindanao region. These services would be extremely difficult to provide at any competitive price by other agencies such as commercial banks, rural banks, Land Bank or the NFA in the near future. This becomes most evident if one takes note of the fact that 44 percent of the municipalities in rural areas of the Philippines have no bank and that another 42 percent have only one bank.

The trader is frequently viewed by the farmer, consumer and others as an individual who is earning large profits and charging usurious interest rates while performing no productive service to the society. A closer examination reveals, however, that the farmer and consumer are dependent upon the trader to perform the essential marketing services of transferring the product from production areas to consumption areas in the right amount, at the right time, and in the correct form. The cost of providing these marketing and financial services to consumers and producers could be reduced with improvements in infrastructure.

The number of corn traders is quite large and is sufficient to induce competition in the corn market. Farmers in some areas may be captive to a particular trader; however, farmers often bypass their historic trader to sell to another trader at a higher price (a practice called pole vaulting) which indicates strong price competition among traders in this region.

The cost advantages of economies of scope in marketing and lending activities lead to low transaction costs for the borrower and lender. Loan making is fast, simple and free of paperwork. Repayment rates appear to be quite good because the trader knows his clients well and because the

farmer knows that he must repay his loan to be able to obtain new loans in the future. Interest rates do not appear to be excessive given the cost of funds in the economy and the relatively high risks associated with lending to agriculture generally and to small farmers in particular.

Traders and farmers agree that many improvements could be made in the corn marketing and finance system. Short term credit is needed to finance farmer purchases of farm inputs (seed, fertilizer, and chemicals) and medium term credit is needed to finance the purchase of farm machinery such as corn shellers, solar and mechanical dryers, and farm storage facilities. Most corn traders use large amounts of equity capital in their business; however, they also indicated a need for short term credit, using the crop as collateral, to finance their purchase and storage operations and medium term credit to finance new corn storage and handling facilities. Long term credit is needed to finance improvements in the General Santos storage and port handling facilities and the construction of farm to market roads. These infrastructure improvements could reduce significantly marketing costs to the benefit of all producers and consumers.

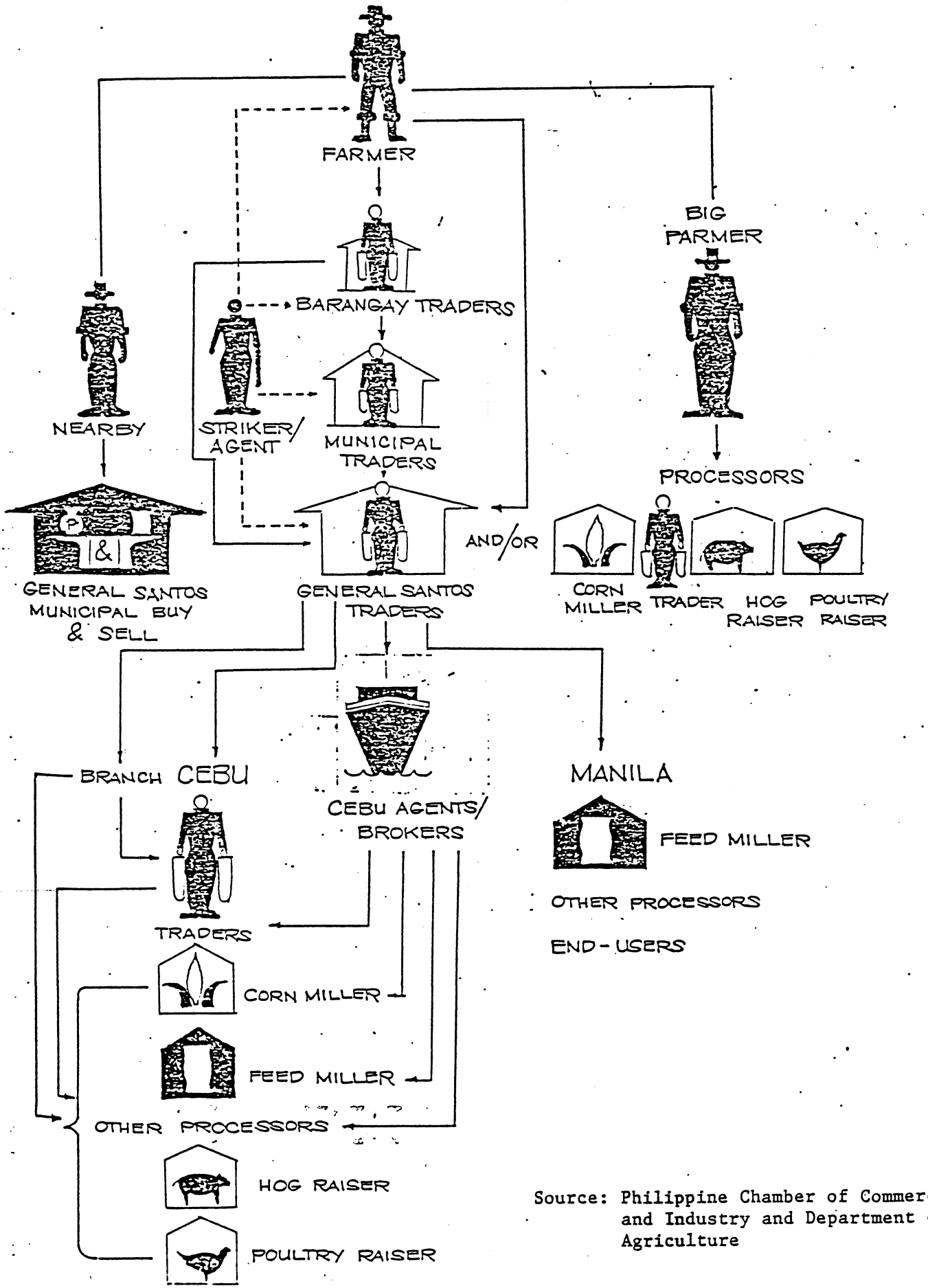
Commercial financial services are very hard to find in these rural areas. As mentioned above 44 percent of the municipalities in rural areas have no bank. Financial market repression in the past appears to have contributed to the decline in lending to agriculture from formal financial institutions. Given the recent financial liberalization, the government should continue to promote market interest rate policies and encourage branch banking and other forms of financial market services in selected rural areas. It is evident from the results of this study that the cost

of funds is not as important to farmers and traders as is the access to credit and other financial services.

Commercial banks, rural banks, the Land Bank, traders and other members of the IFMs all serve different segments of the total market for financial services. No one group could possibly serve all the different segments of this market. The government must avoid policies which attempt to hinder or to eliminate trader credit (NFA, MSI, etc.) because trader credit is the most important source of credit to a very large number of farmers.

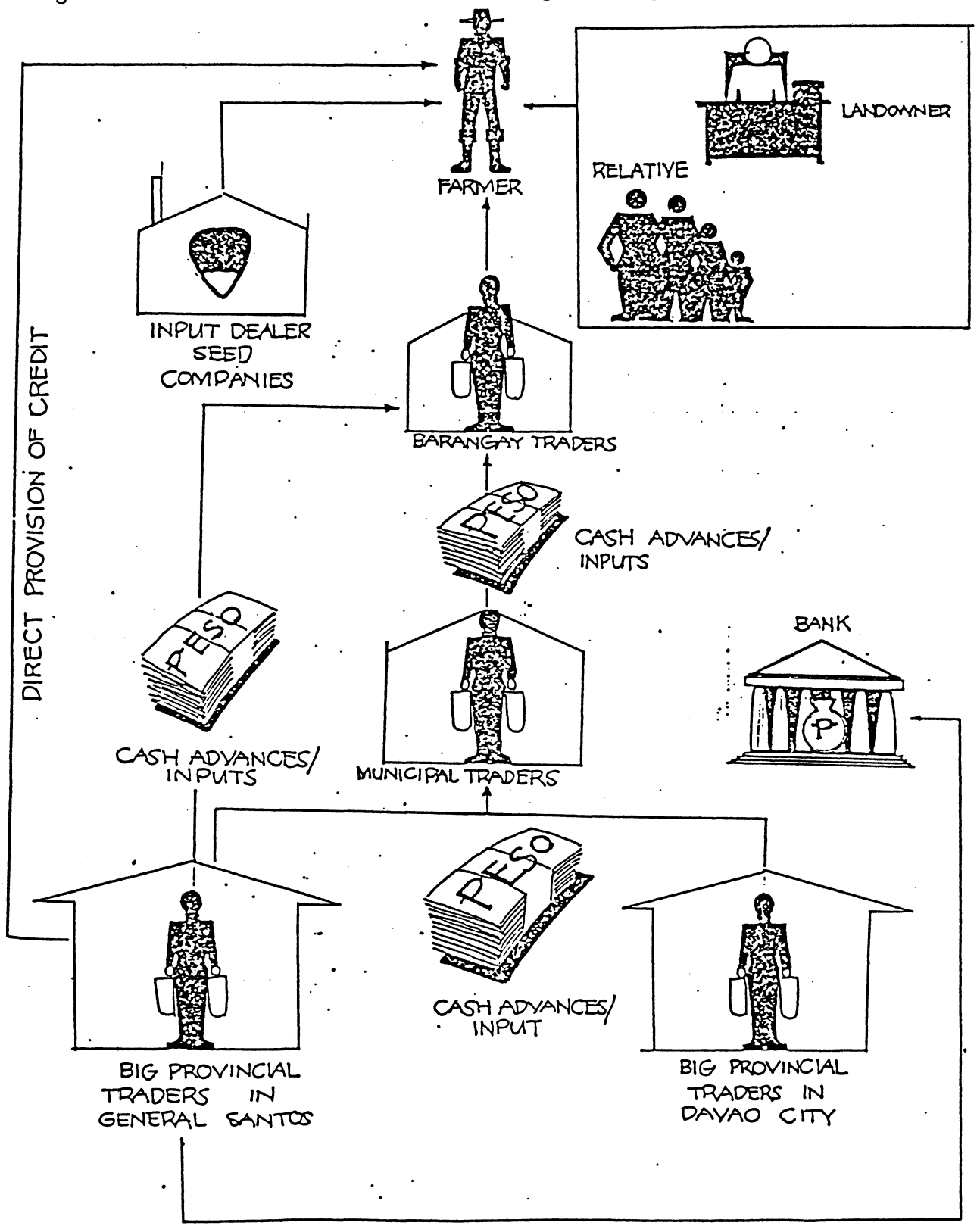
Corn traders, producers and end users indicated a need to study and rationalize government price policy in the corn sector. This should include the import policy for corn and other feed grains, support price policy, the flat seasonal price policy, relative price policy among competing food products of rice, corn and wheat, and port and transport policy for shipping corn from Mindanao to Manila.

Figure 1: Commodity Flow of Corn



Source: Philippine Chamber of Commerce and Industry and Department of Agriculture

Figure 2: Flow of Credit to Corn Marketing Participants



Source: Philippine Chamber of Commerce and Industry and Department of Agriculture

Table 1: Corn: Supply-Use and Related Statistics, Philippines

Item	1980	1981	1982	1983	1984	1985	1986	1987
Supply-Use ('000 MT)								
Carryover Stock (Jan. 1)	258.0	218.6	235.5	263.9	319.1	181.5	431.1	241.1
Production	3050.2	3295.7	3404.0	3134.0	3250.3	3862.8	4090.7	4278.1
Imports[1]	249.9	253.1	340.9	528.4	182.4	281.2	0.16	55.8
TOTAL SUPPLY	3558.1	3767.4	3980.4	3926.3	3751.8	4325.5	4522.0	4575.0
Food	1577.5	1551.5	1559.5	1493.5	1491.2	1569.5	1518.8	1597.9
Seeds	64.0	65.9	67.6	62.6	64.5	70.2	71.9	65.1
Feeds, Wastes and Others	1666.6	1917.7	2090.5	2043.5	2013.8	2224.4	2695.5	2781.9
TOTAL DEMAND	3308.1	3535.1	3717.6	3599.4	3569.5	3864.1	4286.2	4444.9
PRODUCTION (Million MT)								
TOTAL	3.051	3.296	3.404	3.134	3.250	3.863	4.091	4.197
January-June	0.820	0.879	0.873	0.595	0.807	0.996	1.055	0.980
July-December	2.231	2.417	2.531	2.539	2.443	2.867	3.036	3.217
AREA ('000 Ha)								
TOTAL	3.198	3.295	3.383	3.132	3.227	3.511	3.595	3.692
January-June	1.061	1.101	1.167	0.941	1.080	1.167	1.201	1.169
July-December	2.137	2.194	2.216	2.191	2.147	2.344	2.394	2.523
YIELD (MT PER Ha)								
TOTAL	0.954	1.000	1.006	1.001	1.007	1.100	1.138	1.137
January-June	0.773	0.798	0.748	0.632	0.747	0.853	0.878	0.838
July-December	1.044	1.102	1.142	1.159	1.138	1.223	1.268	1.275
STOCKS ('000 MT)								
TOTAL								
January 1	258.0	218.6	235.5	263.9	319.1	181.5	431.1	241.1
July 1	148.3	175.2	172.4	103.6	180.8	151.1	234.3	92.6

[1] NSO data.

Source: Bureau of Agricultural Statistics

Table 2: Marketing and Financial Services Offered by Corn Traders in Mindanao, Phillipines, 1988

Service	Percent Offering Service
Transportation	68
Bags	63
Bagging	47
Grading	16
Shelling	42
Drying	47
Storage	95
Price information	90
Technical information	47
Financing with cash advances	68
Input sales on credit	26

Source: Field Survey, 1988

Table 3: Selected Characteristics of Corn Traders in Mindanao, Philippines, 1988

Item	Average	Range
Number of Full-Time Employees	4.2	1 - 200
Age	42	22 - 60
Education in years	16	12 - 16
Years in business	9.7	1 - 28
Corn purchases in pesos[a]	10 million	100,000 - 185 million
Number of farm suppliers	424	30 - 3000
Storage capacity in bags	5400[b]	500 - 200,000
Number of competitors in your area	21	5 - 50
Percent of purchases at business	82%	20% - 100%

[a] The exchange rate at the time of the survey equaled P 21.30 per U.S. $1.00.

[b] Average excludes the storage capacity of one large firm.

Source: Field Survey, 1988

Table 4: Estimated Number and Size of Corn Traders in Manila and General Santos, Philippines, 1988

Location	Number of Corn Traders	Monthly Corn Purchases During Harvest Season
		- - - Metric Tons - - -
Manila		
	1	Over 10,000
	4	5,000 to 9,999
	10	1,000 to 4,999
	50	Less than 1,000
Total	65	
General Santos		
	9	2,000 to 3,000
	7	1,000 to 1,999
	25	Less than 1,000
Total	41	

Source: Field Surveys, 1988

Table 5: Comparison of Monthly Procurement of Yellow and White Corn by National Food Authority and Private Traders, General Santos Region, 1986

(in Metric Tons)

	YELLOW CORN			WHITE CORN					
1986	N.F.A.	Private Traders	Total	N.F.A.	Grains	Grain Equivalent[1]	Total	GRAND TOTAL	APPROXIMATE MONTH OF PLANTING[2]
JAN	122	5,292	5,414	25	6,480	529	7,036	12,451	October
FEB	16	5,838	4,854	-	8,404	758	9,162	14,017	November
MAR	-	4,918	4,918	-	16,034	1,268	17,302	22,221	December
APRIL	8	3,045	3,053	-	4,899	862	5,762	8,815	January
MAY	2	2,770	2,772	8	6,419	259	6,678	9,450	February
JUNE	59	387	446	507	2,727	57	3,292	3,739	March
JULY	420	7,339	7,759	1,948	10,889	718	13,556	21,316	April
AUG	1,124	9,361	10,485	1,536	9,034	761	11,332	21,818	May
SEP	1,511	6,773	8,284	1,485	8,202	1,040	10,728	19,013	June
OCT	112	6,818	6,931	199	7,440	384	8,024	14,955	July
NOV[3]	25	4,417	4,442	443	9,695	1,092	11,232	15,674	August
DEC[3]	200	12,292	12,472	550	13,451	1,388	14,840	27,312	September
TOTAL	3,600	68,236	71,836	4,618	105,776	7,735	118,951	190,787	

[1] Conversion rate for corn grits back to grains in 0.65 + volume of grits.
[2] Approximation by Edgar Soguilon.
[3] Missing data computed from other data.

SOURCE: NFA

Table 6: Monthly Wholesale Prices of White and Yellow Corn in General Santos City, Mindanao, Philippines, 1988

Month	White Corn	Index Value	Yellow Corn	Index Value
	Pesos/kg.[2]		Pesos/kg.[2]	
January	3.30	110	3.35	114
February	3.35	111	3.33	113
March	3.35	111	3.28	111
April	3.15	105	3.03	103
May	3.07	102	2.95	100
June	2.63	87	2.55	86
July	N.A.	-	2.60	88
August	2.43	81	2.45	83
September	2.73	91	2.73	92
October[1]	2.88	96	2.88	98
November[1]	2.95	98	2.95	100
December[1]	3.25	108	3.25	110
Average	3.01	100	2.95	100

[1] Prices for 1987 instead of 1988.

[2] Exchange rate equals P 21.30 per U.S. $1.00 in 1988.

Source: Field Survey, 1988

Table 7: Advantages and Disadvantages of Farmer Borrowing From Corn Traders as Reported by Corn Traders in Mindanao, Philippines, 1988

Advantages Compared to Banks	Disadvantages Compared to Banks
Less paperwork	Higher interest rate
Fast processing of loans	Obliged to sell crop to trader
Can borrow anytime	
Loan amount flexible	
Little or no collateral	
Low borrower costs	
Fast release of funds	

Source: Field Survey, 1988

Table 8: Characteristics That Corn Traders Consider Most Important in Credit Worthy Borrowers, Mindanao, Philippines, 1988

Item	Percent of Traders Listing Characteristics
Ability to pay	77
Honesty and Integrity	38
Character	31
Collateral	23

Source: Field Survey, 1988

Table 9: Financial Measures of Corn Traders Lending to Farmers in Mindanao, Philippines, 1988

Item	Average	Range
Percent of Traders Lending to Farmers	68%	-
Number of Loans per Trader	75	20 - 200
Size of Loan	P8,575	P1,000 - 50,000
Interest Rate	4%/month	2% - 10%
Default Rate	18%	5% - 70%
Percent of Traders Selling Inputs on Credit to Farmers	26%	
Length of Loan on Input Sales	3 months	2 - 4 months

Source: Field Survey, 1988

Footnote

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References

Baumol, W.J., J.C. Panzer and R.D. Willig. Contestable Markets and the Theory of Industry Structure. New York: Harcourt Brace Jovanovich, 1982.

Blanco, Rhenee and Richard L. Meyer. "Rural Deposit Mobilization in the Philippines, 1977-1986". A Paper Presented at the Workshop on Financial Intermediation in the Rural Sector: Research Results and Policy Issues. Sponsored by the Agricultural Credit Policy Council, the Philippine Institute for Development Studies and The Ohio State University. Manila, Philippines. September 26-27, 1988.

Department of Agriculture, Bureau of Agricultural Statistics. "Selected Statistics on Agriculture". Manila, The Philippines. April, 1988.

Esguerra, Emmanuel F. "On the Use of Informal Lenders as Conduits for Formal Credit: The Case of the National Agricultural Productivity Programs in the Philippines". ESO 1351, Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, Ohio. May, 1987.

Geron, Piedad S. "Philippine Informal Rural Credit Markets: Efficiency and Equity Issues". Paper presented at the workshop on "Policy Considerations for Structural Changes and Development in the Agricultural Sector". University of the Philippines at Los Banos. March, 1988.

Ghate, P.B. "Some Issues for the Regional Study on Informal Credit Markets". Manila. Asian Development Bank. 1986.

Lamberte, Mario B. and Joseph Lim. "Rural Financial Markets: A Review of the Literature". Philippine Institute for Development Studies Staff Paper Series No. 8702. 1987.

_____ and Anita Abad Jose. "The Manufacturing Sector and the Informal Credit Markets: The Case of Trade Credits in the Footwear Industry". Philippine Institute for Development Studies Working Paper No. 88-07. May, 1988.

Larson, Donald W. and Rene Urquidi. "Competitiveness of Informal Financial Markets in Bolivia". ESO 1426. Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, Ohio. December, 1987.

Philippine Chamber of Commerce and Industry and Department of Agriculture. "Corn Marketing System Study in Region XI South Cotabato". Manila, The Philippines, 1988.

Real, Jr. The Honorable Isidoro. "An Act Revising the Rural Banks' Act". A House Bill Introduced by a Member of the House of Representatives, Quezon City, Republic of the Philippines. September, 1988.

Tolentino, Bruce J. Executive Director, Agricultural Credit Policy Council. Republic of The Philippines. Personal interview, August, 1988.